

CALIFORNIA-NEVADA  
TAHOE BASIN FIRE COMMISSION

Summary minutes of the September 21, 2007 meeting

Incline Village General Improvement District Chateau, Incline Village, Nevada

MEETING MINUTES

**1. CALL TO ORDER AND ROLL CALL**

Members Present:

Co-chairs Kate Dargan, Sig Rogich, Commissioners Pete Anderson, Michael Brown, Bob Davidson, Ruben Grijalva, Bud Hicks, Ron McIntyre, Jeff Michael, Jim Pena, John Pickett, Cindy Tuck, John Upton, Patrick Wright, James Wright. Ex-officio Members Present, Allen Biaggi, Leo Drozdoff, Amy Horne, Julie Motamedi.

Members Absent:

Jim Santini, John Koster

It was noted that a quorum was present.

**2. PUBLIC COMMENT**

Margaret Blush, a resident of Gardner Mountain spoke with the commission and said that she had been evacuated twice over the years in the face of wildfires. It is a very frightening situation. She discussed absentee landowners in the Basin. When local residents recognize a dangerous situation they may take action themselves as she and many of her neighbors did. They worked together to clear a vacant lot of pine needles and fallen logs. It was a costly and laborious effort, but Ms. Blush feels that it is important to make her neighborhood as safe as possible. Ms. Blush suggested that the commission might recommend that property management companies be required to keep rental properties fire safe. She reminded the commissioners that there are many part time residents in the Basin and absentee landowners who should be required to maintain fire safe lots.

Sue Abrams presented the commission with four studies that refer to private property. She also submitted a model gubernatorial proclamation. Her reports will give some insight into what is like to be a property owner in Lake Tahoe. The five most important points for real change; creation of a public resource code (which will

mirror California 4291 sections a and b) for the entire basin. She made several suggestions; activate basin wide mandatory enforcement utilizing all fire districts within the basin in cooperation with California Department of Forestry and Nevada Department of Forestry as sole controlling agencies, closure of the Tahoe Regional Planning Agency to be replaced with an new agency, return management of lands owned by the United State Department of Agriculture Forest Service (USDA) to the states of California and Nevada, change policies and practices of El Dorado County regarding unincorporated portion of South Lake Tahoe and/or annex unincorporated portion of South Lake Tahoe (SLT) to the City of SLT. The commission should not be bogged down in the details of types of roofs, sprinkler systems, etc. As an example, sprinkler systems are not meant to safe a house in a fire storm. She suggested that the commission concentrate their efforts on the five issues she has presented and consider the seriousness of the situation from the perspective of a Lake Tahoe homeowner.

Steve Teshara of the North Lake Tahoe Chamber of Commerce commended the commission and the Basin Fire Chiefs who will present a nine point plan during the meeting today. He also supports the participation of Cal Fire in the process.

Rich Adams of California State Parks discussed his efforts in fire treatments in the Washoe Meadows State Park. He gave a brief example of a recent experience. He was touring Washoe Meadows State Park with a contractor after the Angora Fire. The contractor indicated that he was willing to complete the work of removing dead trees, chip them, and distribute them, all at no cost to the state. They were there with staff from Lahontan Water Quality Control Board (LWQCB.) Most of the park is stream environmental zone (SEZ) though the area they were observing was more than 300 feet from a stream, but close to a road. Due to existing regulations, LWQCB could not permit the contractor for the activities he had offered to perform. Because the work would require tractors and other machinery to remove the downed trees, the Lahontan staff suggested that the work would need to be done by hand. Mr. Adams emphasized the need to complete this work in the most effective manner and suggested that the commission might take a field trip to the Washoe Meadows State Park in order to gain a clearer understanding of the challenge. As a forester, Mr. Rich feels that at this point, his hands are tied in regard to ability to get the job done.

John Pickett asked if Mr. Adams had had a similar experience this year with the Aspen restoration project. Mr. Adams said that they had some difficulties with a grant funded project (from the Bureau of Reclamation) that called for removing encroaching conifers from existing hardwood groves near streams. They had proposed using heavy equipment over the snow because the trees they had been tasked to thin were too large to remove by hand. After two years, it was obvious that it would not be possible to be issued a permit. They never requested a permit.

Mr. Pickett asked about the permit process and said that he wondered how many permits were never requested because field work had indicated that one would not be issued. Mr. Adams agreed and said that in many cases, as in the situation he had earlier described, it is clear after touring the area that it would not be possible, under current regulations, to be granted a permit or waiver. He felt that it was a lost opportunity.

Bud Hicks thanked Mr. Adams and said that he looked forward to the nine recommendations that would be presented by the Tahoe Basin Fire Chiefs. He said that the commission takes, very seriously, all information and input from the experts. Bob Davidson agreed and offered his thanks.

John Upton discussed a presentation from LWQCB and said that the commission had been told that only four permits had been submitted since 1994. He suggested that it would be useful to have an understanding of projects that had never been proposed and the barriers that had been encountered.

David Mercer of Cross Check Services in Olympic Valley, California is a California licensed timber operator who has lived in Lake Tahoe all of his life. He said that everyone in his company loves the lake and doesn't want to see the forests burn. His company contracts with the State Parks and operates low impact logging equipment. He asked the commission to consider three issues; 1) there is too much fuel in the basin, in which case you can either let it burn or you can remove it, 2) too many houses, 3) lake clarity. He suggested that lake clarity is most vulnerable when we experience large fires. The cost had become prohibitive and, as profit margins are decreasing, local businesses may need funding to make the process financially viable. There is no funding to pay for projects to be completed and fuel costs continue to rise.

Amy Horne asked about the fuel loads in the basin and areas outside the basin and how they compare. Mr. Mercer said that currently the most dangerous area is in Plumas and that his company is not working in the Lake Tahoe Basin at this time.

Mr. Upton asked if there are any areas his company would suggest that the commission tour. Mr. Mercer said that because they did not have permits they are not currently working in the basin and so they could not offer a tour.

Mr. Pickett asked about markets for lodge pole size cuttings and wondered if whole tree yarding as opposed to cut to length would help with recouping costs of tree removal. Mr. Mercer said that whole tree yarding is disruptive and that there are not many profitable uses of lodge poles. The only practical uses of removed wood are firewood, chipping, and bio mass.

Cindy Tuck asked about the nearest biomass plant. Mr. Mercer said that the closest one he knew of is in Loyalton, California. He said that costs of transporting materials that far are prohibitive.

Pete Anderson said that as a point of information, there is a state of the art bio-mass plant in Carson City that just opened and that one of the hurdles that have been experienced there has been a lack of materials and long term supply. Nevada is working to revive an industry that has been on the decline for 30 years.

Mr. Pickett said that one of the responsibilities of contractors will be to develop a suite of technologies for working within the basin. He said that it is important for the commission to understand some of the funding and regulations needs of basin contractors.

Dr. Geoffrey Schladow of the University of California Davis Tahoe Environmental Research Center discussed the need to clear up misconceptions about the effects of forest fires on water clarity and quality. He said that it is important to understand what comes off of burned land, especially in the wake of the Angora Fire. We now have an opportunity to collect data. Researchers from his center began collecting data the day after the fire ended. To date, they have not received any reimbursement of their costs. The Science Consortium is also waiting for reimbursement. They have found that their researchers have been denied access to the site in several cases.

Dr. Schladow expressed concern about the next fire and suggested deploying a network of sensors throughout the basin to provide information to responders and to minimize loss. He said that it is important that all stakeholders and resources be utilized in a collaborative effort.

Mr. Rogich asked if Dr. Schladow's group is connected in anyway with the TRPA and suggested that some printed information on their project would be helpful. He asked if it is realistic to expect that Lake Tahoe could be returned to 1970 water clarity levels.

Dr. Schladow said that it is possible. He said that over the last five years there has been more funding and cooperation, although he is still concerned about misconceptions. He continued by saying that 100 foot clarity is attainable but it will require substantial financial investment.

Mr. Rogich asked about tradeoffs in the case of an unattainable goal. He said that without enough funding and in the face of the growth at the lake since 1970, 100 foot clarity may be a very difficult goal to achieve.

Mr. McIntyre asked if Dr. Schladow if he knows of any plans for conducting data collection at this point. Dr. Schladow said that he is not aware of any other efforts, but knows that many groups are hoping to get into the basin to conduct research in the fire area.

Julie Motamedi asked about those who were preventing his group from taking samples in the area. Dr. Schladow was not sure. Jim Pena offered the information that from the perspective of fire safety, the concern is the timing. The area in question was being mulched but that permits would be issued when the timing is right. Dr. Schladow said that he appreciated the information.

Mr. Davidson asked if the Angora Fire was a freak event or if the area and lake clarity are still at significant risk. Dr. Schladow responded by saying yes, the increased population and possible fires have a potential for causing significant degradation in lake clarity. Mr. Rogich suggested that forestry be involved in working up any models that the commission recommends.

Laurie Kemper of the Lahontan Water Quality Control Board discussed the ongoing water quality studies in the basin. She said that LWQCB, working with UC Davis and the Desert Research Institute, is collecting samples and conducting studies. They have requested \$100,000 from El Dorado County and \$600,000 for water quality monitoring. She is not aware of any soil monitoring efforts at this time. Mr. Rogich suggested that we might ask graduate students to assist in the studies.

Patrick Wright said that the Forest Service is waiting for some funding sources to come through. It is likely that the state will secure more funds soon. Mr. Pena added to Mr. Wright's statements by saying that currently there are many projects and efforts in place. He believes that there is a coordinated response involving many agencies. The perception may be that there is little funding, but there are in fact a good many resources.

Ms. Horne said that it would be useful to have a list of existing organizations that are working on research. She said that in order to develop trust in the data, a standing peer review committee is in place to assure an independent objective view of the reports. Mr. Upton said that it seems that we have a fragmented research system and he recommended developing a more collaborative effort.

Ms. Kemper said that as far as water quality is concerned her group is working in a collaborative manner. Many groups have met recently, and are coordinating funding sources and submitting reports for peer review. When the rainy season begins her group will be ready to collect samples as a system is currently in place for data collection.

Pete King, a resident of Incline Village, asked about efforts to reduce over-forestation. He said that there is a good deal of undergrowth in the basin. He suggested that we utilize untapped resources and prioritize forest health over long held views.

Dr. Horne asked Mr. King how he felt about the idea of a plan that raised the diameter for harvesting trees on white firs only. In this way it might be possible to restore the forest to a composition of fire resistant trees. Mr. King said that it would be a good idea and that it would require public education. Ms. Motamedi asked why many trees were not cleared when they were smaller. Mr. King said that there are many reasons, but that mainly residents don't have the resources to complete the work.

Charles Wynne, Regional Administrator of California OES, spoke and said that he will address his issues under the commission's agenda item #4.

Michael Donahoe of the Tahoe Area Sierra Club spoke about the Pathway 2007 forum which is developing a new plan for the basin. He said that speaking today as a member of the Sierra Club he is pleased that the commission has been formed. He said that in conjunction with the League to Keep Lake Tahoe Blue, the Sierra Club was successful in increasing the defensible space requirements from 30 to 100 feet. The goal of his group is to make at-risk communities safer. He suggested exploring reasons for federal budget cuts, understanding if changes signed into law three years ago have been implemented. He said that it is important to understand if lack of compliance with California Code 4291 was in any way responsible for the Angora fire. He also said that enforcement should be the natural follow up to education. After all "an un-enforced law is no law at all." He said that the commission should remember to include studies of pollutant loading from fire events in the report. He expressed concern about the issuing of an emergency declaration but said that he would withhold comment. Finally, he advised that the commissioners not allow themselves to be caught up in the frustration that has been building over the past years and to look forward for solutions. He offered his thanks and his assistance.

Mr. McIntyre said that he appreciated the Sierra Club and asked if they have worked with the Basin Fire Chiefs in regard to California Code 4291. He asked if the Sierra Club had taken a position on the Fire Chiefs' nine point letter. Mr. Donahoe said that they see a starting place for discussion. As to the Fire Chiefs' letter, Mr. Donahoe indicated that he had seen the letter in just the last few minutes and he would need some time to review it.

Mr. Davidson thanked Mr. Donahoe and the Sierra Club for their efforts. He asked if Mr. Donahoe felt that all neighborhoods in the basin could be considered "at risk." and how the Sierra Club viewed defensible space. He asked Mr. Donahoe if he felt that residents should be restricted by any agency as regards defensible space. Mr. Donahoe responded by saying that they believe that all areas in the basin are at risk and feel that it will be important to conform to laws and regulations in regard to defensible space. He continued by saying that he had had a conversation with Governor Gibbons recently and had proposed extending the area of defensible space on lots in Nevada and to correspond to regulations in California.

Dr. Horne asked if it is possible to achieve both defensible space and erosion control practices in a way that would meet everyone's goals and needs. Mr. Donahoe said that he believes it will be possible for everyone to come to an accommodation. He believes that it is possible to both save the lake and save houses with defensible space.

John Cobourn of the University of Nevada Cooperative Extension, a hydrologist with a specialty in water quality, said that he believes that it is possible to achieve both good defensible space and best management practices (BMP.) He works with a group known as BMP Retrofit Partners, a group of agencies consisting of the Nevada Tahoe Conservation District, the Tahoe Resource Conservation District, the USDA Natural Resource Conservation Service, the University of Nevada Cooperative Extension, and the TRPA. His group agrees that public safety must be the number one concern in a fire environment in which we live. He is encouraged by the nine point letter submitted by the Basin Fire Chiefs, but would like further discussion of point nine and four. The fourth point concerns defensible space and calls for the acceptance of the removal by homeowners of all flammable material, including pine needles and wood mulch, around a building or structure to 30 feet. He said that this is an issue that requires more discussion and clarification of the details. His group feels that there could be some conflict but there is a lot of room for common ground. He said that his group has been working on this issue for eight years. They have printed and distributed 21,000 copies of a book that discusses BMPs, defensible space, and mulch.

He continued by saying that the generally held belief is that BMP Retrofit has recommended using pine needles as mulch around structures. In fact, this is only one of their recommendations. There are many alternatives that are more fire safe. He referred to his group's book which outlines several options. Mr. Cobourn suggested that it would be important to conduct more research and he would like to recommend that BMP and water quality experts be included in any technical working groups that are formed. He concluded by saying that his group strongly supports fire safety and public safety.

Mr. Hicks asked about the TRPA and discussions about defensible space and BMP. Mr. Cobourn said that there have been discussions. He said that over the years his group has pushed for a more integrated approach between these two important sets of practices. He said that he feels that there has been some success.

Dr. Horne said that her understanding is that there is about 95% agreement between defensible space and BMP experts concerning the 100 feet space around structures. She asked if members of BMP Retrofit would be willing to sit down with experts on 4291 and Cal Fire to come up with a consistent set of recommendations for reconciling the last 5% and come to agreement on some of the nuances. Mr. Cobourn said that he would absolutely agree and would assist in setting up a meeting.

Paul Mason, a lobbyist with Sierra Club California in Sacramento, said that his group had worked to sponsor SB 1369 which increased the defensible space requirements in California from 30 to 100 feet. He has lived in Meyers, California near Lake Tahoe and has worked on various forestry and fire related issues on primarily non-federal land. He said that he is very familiar with fire issues in the basin. He commented on the nine point letter from the Basin Fire Chiefs and said that it is a good plan and that he agrees with it in general. He agreed that more discussion is needed. The most important thing the commission can do is to recommend a clear articulation of the definition of defensible space in the Lake Tahoe Basin. It is important to understand the complex nature of the basin and the commission might consider making recommendations that allow for site specific requirements. He said that it appears that there is much more agreement among the various agencies than is generally understood by the public.

He continued by saying that perhaps one of the functions of the commission could be to facilitate and coordinate the agencies in a group effort. It may also be important to recognize that there are many risk factors that may not be possible to control. He concluded by saying that he appreciates the efforts of the Fire Commissioners and commends them for their dedication.

Mr. McIntyre asked a question regarding prioritizing healthy forests and clean up, especially in the wildland interface. Mr. Mason said that the feeling is that you start where you live, around structures, and work your way out from there.

Ms. Tuck thanked Mr. Mason for his positive and constructive comments and said that she agrees with his suggestion regarding coordinating efforts.

Jane Schmidt, District Conservationist with Natural Resources Conservation Services, spoke regarding effective partnerships with fire departments. Her group has, at the direction of the fire departments, utilized guidelines for mulch and re-vegetation around properties in the past and continues to do so. When some of the guidelines changed as of August 13, 2007 the Natural Resources Conservation Services changed along with them. Ms. Schmidt said that she was concerned about some of the perceptions that there is a lack of cooperation and communication. She said that her group is open to conversation and suggests that the commission might facilitate more direct communication. She said that she believes that this is about the ability to meet all of the needs of the landscape rather than any one issue. Mr. Rogich said that he agreed and thanked Ms. Schmidt for her comments.

Garry Bowen passed out some materials including a Memorandum of Understanding from the Department of the Interior, the Department of Agriculture, and the Department of Energy, related to bio-mass issues in western states. He also discussed a meeting of the American Institute of Architects that talked about the forests as water factories. He said that he has had a number of conversations with the offices of Senators from both California and Nevada regarding fire resistant materials, and he would like to offer his assistance to the Fuels Committee.

### **3. Fire Briefings**

#### **A. U.S. Forest Service**

Cathy Murphy, Fuels Manager of the Pacific South West Region presented a report that outlined the features of the Angora fire. She said that three factors contribute to fire behavior, fuel, weather, and topography. There are many explanations for the fire behavior in the Angora Fire. Ms. Murphy presented her report, which is available [here](#).

The highlights of her discussion include:

- The day of the Angora Fire, fire conditions were severe.
- The fire was ignited by a campfire.
- All of the three conditions for an uncontrollable fire were in place, fuel, weather, topography.
- One homeowner lost his home because he had up to eight cords of firewood stacked against the house.
- Fire suppression efforts were successful in many cases in saving homes.

- Structures were vulnerable to several fire behavior types, structure to structure, embers, crown fire momentum, surface fires
- There were many examples of vegetation near the home being ignited by the home and not the other way around.
- She discussed the effects of fire treatment on the burned area and said that the removal of trees helped fire crews to limit the damage in the fire treated areas as well as helped reduce the severity of fire in the adjacent area.
- Fire burns with more intensity uphill, therefore we need to have more intensive treatments on steep slopes.
- Fire treatments were successful in the goal of reducing crown fires to surface fires.
- Fire fighters expressed confidence that areas that had been treated were safe to use as staging posts.
- 70 US Forest Service urban lots in the area were examined and it was determined that 80% of the lots had burned with surface fire intensity.
- Many fire fighters reported that they had suppressed a structural fire had moved on to the next home only to return to find a earlier treated home on fire again.
- The Angora Fire moved through stream environment zones faster than in past fires.

In summary, fuel treatments areas responded as intended in reducing crown fires to surface fires.

Mr. Pickett asked about a slide that demonstrated a fuel treatment on a steep slope. He asked when the treatment had been completed. He also said that the area appeared to be a brushy environment. He asked if, in the report, the types of terrain were quantified. He continued by saying that the focus of his questions is to understand a maintenance prescription for steep slopes. Ms. Murphy said that she would have to research the date of the treatment.

Ms. Murphy said that wildfires occur in a natural six to 10 year cycle. She pointed out that fire exclusion policies have disrupted the cycle in some cases. She believes that we need to get into the area and work on thinning and maintenance.

Mr. Pickett asked if the Forest Service is adequately funded to go in with either its own crews or others to complete fire shed assessment projects and community wildfire protection project, and to reliably maintain them.

Ms. Murphy said that the Lake Tahoe Basin is a very well funded region. She said that it may be a matter of planning and organization and that it is a question that can be further explored.

Ms. Tuck asked about fuel treatment and barriers that the Forest Service might face.

Ms. Murphy said that there are a few barriers including, air quality limitation and inversion. California Air Resources Board and individual counties are both involved in permitting for burn days. This can make the process more of a challenge. Ms. Marceron suggested that a topic for a future discussion might be funding opportunities from the White Pine Bill and other sources. She said that for the purposes of time it would be useful to have the conversation when it would be possible to include the overall accomplishments of the Forest Service, the future investment projections, and the anticipated needs.



Mr. Biaggi asked about logged areas that responded to the fire much like the un-treated areas. He wondered why the fact of removing bio-mass was not sufficient to reduce the effect of the wildfire. Ms. Murphy responded by saying that the treatments were completed in the 1990s and were not designed to prevent fires. This was salvage logging and the materials were removed by helicopters.

Pete Anderson asked about the resources and realities of completing treatment projects. He asked if it would be possible to build temporary roads that are sensitive to erosion concerns and to eventually reclaim the area. Ms. Murphy said that, in her opinion, it is a worthwhile objective to pursue and hopes that the commission will address it.

John Upton asked about a slide that depicted an untreated area, an SEZ. Ms. Murphy said that the slide was representative of an area with high density trees, many small trees and ladder fuels, and low growing vegetation. Mr. Upton asked if work had been completed all around the SEZ but not in the SEZ itself and if it was stopped because it was cost prohibitive. Ms. Murphy pointed out the treatment line in the area that had stopped at the SEZ line partly because of cost, but also because of the logistical problems of removing materials by hand.

Mr. Upton asked if a comprehensive environmental document had been completed and if it would have been useful to move equipment into the area to complete the work of a treatment.

Ms. Murphy said that she is not certain of the details of this case but if one looks at the pattern of fire behavior in treated versus un-treated areas it is possible to see that treated areas reacted much better to the fire and, for her, this is the take home message.

Dr. Horne asked for a clarification of the term treatment as it relates to Ms. Murphy's presentation. When you say these areas were treated, were they treated by the removal of fuels alone or were they under burned as well?

Ms. Murphy said that there were a variety of measures taken to treat these areas, hand thinning, some commercial logging, piling the material and burning the piles.

Dr. Horne asked if Ms. Murphy knew what the research shows regarding the effectiveness of under burning. Ms. Murphy said that research has shown that fire risk is reduced with under burning and thinning.

Ms. Dargan asked about defensible space and the burned structures observed after the fire. She wondered if there was any data that described the effectiveness of defensible space. Ms. Murphy said that she is not aware of any updated information. Patrick Wright, Commission member, said that his group had been working on treating the area and had in place an active defensible space program. Mr. Wright will provide information regarding the percentage of homes that have completed the program.

Ms. Dargan pointed out that even if we accomplish defensible space targets on all 42,000 lots in the Lake Tahoe Basin we will still be at risk to structure loss due to embers. There were a good number of structure to structure ignitions during the fire. Ms. Murphy agreed and said the shake roofs and the decks, among other factors, contributed to the problem of burning embers.

Ms. Dargan asked about some modeling on embers that had been completed related to the distance that embers travel in treated as opposed to untreated areas. She said that in the study of the Angora Fire it was determined that structure loss was very dependent on embers. She asked for some information regarding studies that have been conducted relating to embers.

Ms. Murphy said that in a fire sciences lab study in Montana a study was conducted under wind level conditions that were similar to those on the day of the Angora Fire. Under those conditions, trees that were 80 feet tall emitted embers that traveled a maximum distance of .8 of a mile. Piles of embers, which are on the ground, travel a maximum of 500 feet.

Ms. Dargan made an observation for the commission. She said that it is important that they consider, not only, fuel treatment and defensible space, but also existing housing stock. Ms. Murphy agreed and said that the effort will require a comprehensive approach.

Mr. Rogich said that the commission will consider formalizing reports from the fire agencies. Josh Hicks said that it would be acceptable either to formally or informally accept the reports. They will become part of the record as they have been presented to the commission. Christine Sprough said that because they are not an itemize part of the agenda it is not necessary to formally accepted.

Mr. Rogich said that he would prefer that they be formally accepted.

Dr. Horne said she hoped that before the documents were formally accepted that the commission would be certain to accept them in a value neutral and objective way. She feels that it is important that reports not be cherry picked and that all are accepted as they are presented.

Mr. Rogich agreed and said that any formal reports that are submitted by fires agencies will be accepted and none excluded.

## MOTION

Formally accept reports submitted by the United States Forest Service

Moved: Ron McIntyre

Seconded: John Upton

Vote: Unanimously accepted

John Koster and Jim Santini absent

## 3. Fire Briefing

### B. CAL FIRE

Ethan Foote, Assistant Chief Cal Fire State Fire Marshal's office, has approximately 20 years of experience and research in the subject matter that he will present today. It forms the foundation of assumptions that the California State Fire Marshal's office uses in developing the wildland urban interface building standards. His report will compliment Ms. Murphy's report from the US Forest Service.

Mr. Foote reported on home ignitions and conflagrations. As a member of a committee He discussed slides that he planned to present. Highlights included the following:

- The Angora Fire is representative of a decade's long problem of wild fires that trigger extensive loss of homes.
- Fire behavior is actually fairly simple to understand, it simply moves from one fuel source to the next and tries to propagate itself.
- There are three ways to ignite fire, direct flame contact, heat radiation, flying embers.
- In many cases fires spread because fire fighting agencies are simply overrun.
- It is time to start questioning assumptions that have been unchallenged over the years.
- What are the realities of wild fire exposure? In less than three minutes a fire can work its way through a relatively small area.
- The key would be to contain a fire as long as possible.
- The distance of a house from a fire is crucial to the protection of the house.
- Fire resistant construction can reduce risk of losing your home to fire. However, some homeowners pay for one hour protection when all they really need is one minute.
- Need to use a "hand in glove" approach. The emphasis should be on the use of several prevention methods, fire resistant materials, fuels management, fire professionals' response, etc.
- It is a reality that wind driven conflagration cannot be stopped and no amount of fire responders can make a significant difference.
- In the 2003 Simi Fire many houses that were built with fire resistant materials survived.
- Asked that anytime the commission is presented with suggestions they ask two questions; 1) how does this idea contribute to reducing loss and 2) how can it be done in an effective way?
- The National Fire Protection Agency has said that homes cannot be protected from conflagration fires. The only possible relief will come from the proper use of building materials and by the provision of exposure protection.
- Our goal continues to be to prevent conflagrations in cities.
- National Wildfire Coordinating Group has produced a two day course for assessing your home and ignition zone.
- Wildland interface research initiative is working to study embers and the types and sizes that are most dangerous.

Mr. Pickett asked at what temperature does a double pane window break? Mr. Foote said that it depends how far away the window is from the heat source.

Mr. Pickett asked about resistant construction and wondered how to retrofit existing homes. If it is not possible, what are the alternatives? Mr. Foote said that you can retrofit and look at all of the factors. Just retrofitting the wood roofs is an enormous improvement. There is only one roof type that ignites before the inside of the house and that is a wood roof. It is important to look at both the materials on the home and the vegetation. Test standards do not exist at this time to test vents in a home. The test standards do not exist without requirements and there will be no requirements without test standards. For many years we have been caught in a regulatory circle.

Mr. Rogich suggested that the commission might make recommendations to local communities, city and county governments to consider regulations regarding roofs and other fire resistant codes.

Mr. Upton suggested that the recommendations might include in the components of defensible space inspections a review of retrofitting, roofs, and decks. It would be important to include lists of suggestions to homeowners.

Dr. Horne said that it would great if the BMP retrofit personnel and the defensible space personnel could come up with a comprehensive recommendation system. For example, in Incline Village, not only new homes but existing homes that require permitting require an inspection. We might combine efforts for inspections into one system.

Mr. Hicks asked how a homeowner might obtain information about materials that are fire resistant without having to go to a salesman.

Mr. Foote said that the State Fire Marshal's office offers classes. He stressed the need to address both home and vegetation as a package when considering recommendations for fire protection. He added that it is important to remember that it is difficult to regulate everything and that realistically, it is not possible to make a home 100% fire proof.

Ms. Dargan reminded the commission that the Tahoe Basin Fire Chiefs are currently discussing this issue.

Mr. Grijalva said that new ignition resistant standards will be in place in January 2008. Material manufacturers who comply with these standards will be encouraged to advertise as producers of fire resistant materials and their information will be available on the Cal Fire website.

Mr. Davidson asked if the insurance industry is involved in the process. Mr. Foote said yes, they are.

Ms. Motamedi asked about houses that were standing while others burned. She said that she understood that two factors contributed to this; 1) the homes were newly constructed with fire resistant materials, 2) the landscaping was designed with fire resistance in mind.

We should take advantage of the wealth of material we have from the Angora Fire and consider certifying builders who comply with safe fire standards.

Jeff Michael added to Ms. Motamedi's comments by saying that other factors that contributed to the protection of homes were the fire agencies' response and defensible space.

Ms. Dargan said that she agreed that the Angora Fire provides many research opportunities.

#### MOTION

To formally accept Cal Fire documents

Moved: John Upton

Second: Jim Pena

Vote: Unanimously approved

John Koster and Jim Santini absent

### 3. Fire Briefings

### **C. Nevada Division of Forestry**

Mr. Pete Anderson discussed statutory differences with California. He said that Nevada has regulations for:

- building, roofing
- clearance
- elimination of fire hazards
- controlled and prescribed fires

He also discussed the Nevada State Fire Council which has merged with California and has been successful in delivering fire plan income and has been successful in working with the Nevada legislature. He said that 7000 acres in the basin are state lands. He acknowledged that the Division of Forestry has a huge project ahead in looking for an efficient and cost effective means to treat the forest.

Mr. Anderson discussed the accomplishments of his division and said that the EIP has spent \$24 million or 50% of the dollars allocated by the Nevada Legislature for forest management. As state foresters continue to work together it is important that we remember that we are dealing with a national problem.

Mr. Pickett asked if the NDF has been required to decommission roads that would give access to state lands. Is the NDF working on a plan to move bio-mass to Carson City?

Mr. Anderson said that access to burned areas continue to be a big component to the problem. However, plans in place for increasing access. The most significant hurdle is the process of moving materials from the forest to a transportation hub.

Mr. Hicks said that he understands that there is just a short time window to complete this type of work. What are the other constraints?

Mr. Anderson said that weather and tourist traffic are challenges and that realistically, there are only three months each year to work on any treatment plan.

Mr. Hicks asked about the possibility of expanding the time permitted for treatments. Mr. Anderson said that the most important factor is weather, dry conditions are essential.

Dr. Horne asked about fire behavior. She wondered if we maintain the forest as it is in this aged state, what will be the outcome. Mr. Anderson said that a diverse forest with both new and older trees is important to resisting infestation.

Dr. Horne asked if a policy might include shifting of the forest aging structure and reproduce a system that is comparable to the Comstock era forests. Mr. Anderson agreed and said that it could be accomplished over a period of time.

Ms. Dargan asked about the types of contracts that would be necessary to support the NDF bio-mass plan. She said that information from the beetle kill issue might be helpful.

Mr. Anderson said that NDF could put together an issue paper on bio-mass that addresses mixed green wood, landfill waste and a combination of products. Not all materials would, necessarily come from forest treatments. Unfortunately, there are many examples of infestation in Northern America.

Mr. Rogich asked Mr. Anderson to explain the process as infestations can have serious impact on water sheds.

Mr. Hicks asked if forest health can be reconciled with water clarity and where does needed funding come from? Mr. Anderson said yes, forest health can be reconciled with water clarity and many states are facing the same problem. As to funding, Mr. Anderson believes that we might look to the Southern Nevada Public Lands Management Act.

Mr. Biaggi said that we should look to the actions we can take now regarding forest health.

Mr. Rogich said that the commission will address financing in the future. He pointed out the fact that Nevada is the only state in the United States that has a process for spending money earned by sales of public lands and earmarking funds for projects that contribute to the public good. He continued by saying the he feels we are in an emergency situation and need to take immediate action. He asked if there had been any consideration to consolidating the fire districts in the Lake Tahoe Basin.

Mr. Grijalva responded by saying that Cal Fire was not in the business of gobbling up local fire districts and that they defer to local preferences.

The discussion turned to fuel modification, resistant construction, and defensible space as it relates to California Public Resource Code 4291. Highlights and goals included:

- A recent Governor's emergency declaration allowed for more inspectors in California.
- Handouts to the public called for 100 feet of defensible space, first 30 feet should be clean, green, and lean. The second 70 feet should consist of structures that are made of fire resistant materials.
- These guidelines should apply to everyone.
- Homeowners play an integral part in defending their home
- Clear cutting of the forests is not the goal
- Homeowners' responsibility is 100 feet from structures or to their property line.
- Compliance with all laws is essential
- Environment is a key consideration
- Keep soil disturbance to a minimum
- SEZs are vitally important
- Eliminating downed and dead materials that can burn easily
- Provide separation of fuel types
- Keep the fire that is on the ground from moving to crowns by pruning and removing brush and ladder fire materials
- Overriding goal is to see that more homeowners can defend their property.

Ms. Tuck asked if it is possible to estimate the level of compliance and how is enforcement handled? Mr. Grijalva said that compliance has been good and that they are utilizing a multi-step process, including education. The goal has been to find agreement before any enforcement measures are necessary.

Ms. Motamedi discussed defensible space. She expressed concerns about defensible space and commercial core areas. She suggested investigating working with ski areas to create a first level of defense on the mountains. Mr. Grijalva said that 4291 applied to commercial settings as well as private homeowners. He

said that business owners have been very cooperative and they clearly understand the risks. He believes that education has brought compliance and understanding.

Mr. Drozdoff asked how Lake Tahoe Basin compliance rate compare to the rest of the state. Mr. Grijalva said that we are now stepping up the inspections and that there is not much to compare to at this point.

Mr. Patrick Wright asked about the certification system. He wondered if it would be possible to encourage Cal Fire to be creative with compliance mechanisms. Mr. Grijalva said that they are working with various agencies to ensure enforcement of 4291. He believes that enforcement might be accomplished through local fire districts.

Mr. Rogich asked if it would be helpful to look to district attorneys or local law enforcement to assure compliance. Mr. Grijalva said that any assistance would be helpful.

Mr. Pena asked about risk management. He suggested discussing a framework that included assessment of acceptable risks and trade offs of values. We agree that it is possible to achieve both water clarity and defensible space. We now need to determine what level of compromise is acceptable.

Ms. Dargan said that some case studies might demonstrate the process of risk assessment.

Mr. Upton asked if Cal Fire responds to requests for inspections or if they initialize a blanket approach. Mr. Grijalva said that they respond to requests but hope to increase inspections as more funding and personnel are available.

Ms. Motamedi suggested working with insurance commissions to suggest insurance restrictions on vulnerable homes being sold. She asked about enforcement on unimproved land. She said we should try to provide more tools to fire districts, assist some homeowners who have reported losing their insurance because based on defensible space problems, and offering assistance to homeowners for creating defensible space and provide a certificate that can be submitted to insurance companies.

Mr. Rogich asked that more information on defensible space and insurance requirements be submitted.

Mr. Carl Duncan, a member of the public, said that National Forest Service land adjoins his property and he wondered about the possibility of clearing that land as well as his own. A representative of USFS said that they have been working to treat urban lots in the basin and hope to have the job completed within two years. The USFS is committed to helping people such as Mr. Duncan.

Mr. Rogich asked if a homeowner can, legally, remove materials from Forest Service land. The representative of the USFS said that the priority is to treat urban lots and to have an aggressive system in place to do so.

### **3. Fire Briefings**

#### **D. Lake Tahoe Basin Fire Chiefs**

Norb Szczurek of the North Lake Tahoe Fire Protection District discussed the history of defensible space programs. He said that in 2004 some of the measures that were taken include:

- Tracking of inspections
- Marking trees to assist the TRPA
- Working to achieve compliance through education, block parties, and other community events, and a traveling display board
- In 2005 homeowners need to comply with defensible space requirements in order to be permitted for tree removal
- Offer curb side chipping for those who comply with defensible space requirements

Challenges faced by the North Tahoe Fire Protection Districts include the need to revisit inspection sites. He suggested adopting one standard or code for the entire basin, and to continue to educate homeowners and to communicate with the public.

Ms. Dargan asked about tree permits and wondered about the average number of requests. Mr. Szczurek said that it would be necessary to research the answer. Ms. Dargan asked about the length of time required to complete an inspection and to follow up with information. Mr. Szczurek said that currently it takes about 45 minutes of staff time, though they are now backed up with requests. Ms. Dargan asked if seasonal fuel crews have been assisting in checking for compliance. They are offering some help but they have several duties as well. One goal of his group is to assist in the removal of hazardous trees and to inform the public of what they can do in terms of defensible space without a permit.

Mr. McIntyre asked about the White Pine Plan and SNPLM plans for funding on this project. Mr. Szczurek said that the Fire Protection group is always looking for funding because it is important to get all of the work completed.

Dr. Horne asked how funding is awarded for the five fire districts in the basin. Mr. Szczurek said that there are seven fire districts and that everyone realizes and agrees that there are realistic levels of what can be done.

How many acres are treated each year? 500 acres generally, but it may depend on fires that occur during the year.

Mr. Pickett asked about TRPA tree removal permits and the cost of removing a permitted tree. He asked about the length of time between a homeowner's telephone call and a visit and a permit issued. Mr. Szczurek said that the budget allows for about \$28,000 per season per forester. A forester can multi-task but there is some concern about funding. He said that there is about one week from the call to the visit and permitting. Again, the process is in backlog.

Lake Tahoe Basin Fire Chiefs – Nine Point Recommendation Letter  
Lorenzo Gigliotti, South Lake Tahoe Fire Department

The purpose of the letter is to address questions from the Tahoe Basin Fire Commission, to address the problem of mixed messages to the public, and to work together as a bi-state organization. The recommendations are read for the commission:

- 1) Removal of TRPA's Code of Ordinance requiring approval prior to removing trees within 100 feet of a building or structure to allow homeowners to meet PRC 4291 with modifications. LTB Fire



- Agencies will have authority to recommend trees be removed in accordance with PRC 4291 with modifications.
- 2) Removal of the coverage increases that result when ingress/egress roads are required for emergency use.
  - 3) Acceptance of a five foot noncombustible “moat.” Rock, gravel, brick or pervious concrete applied in this area shall not be considered a coverage increase.
  - 4) Acceptance of the removal by homeowners of all flammable material, vegetation or other combustibles including pine needles and wood mulch around a building or structure to 30 feet.
  - 5) Acceptance of 100 feet of defensible space around any structure regardless of ownership.
  - 6) Acceptance of up to 300 feet of defensible space on sloped properties.
  - 7) Acceptance of the removal of native shrubs and trees under the drip-line of any tree or below any deck or overhang.
  - 8) Understanding that all enforcement of the building standards and defensible space requirements shall be the responsibility of the local fire agency.
  - 9) Understanding that all BMPs required by the TRPA code that are in conflict with PRC 4291 must be repealed.

Mr. Davidson asked for clarification in that Nevada is not obligated under PRC 4291 but that the recommendation is to standardize the requirements. Will this apply to all properties in the basin without exceptions? The answer was, as recommended, it will apply to all properties in the basin, federal, state, and private buildings.

Mr. Davidson asked if 4291 addressed vacant lots without structures. 4291 does not address this issue. Mr. Davidson continued with a question regarding regulations that apply to additions to homes in the basin such as decks and overhangs.

Answer: Currently, in case of a conflict, TRPA regulations trump Fire Safety agencies.

Mr. Rogich asked if the application of all these ordinances apply to Forest Service lands, with or without structures.

Answer: Item number five in the recommendations address this issue. For example, in an urban lot environment we have situations where adjoining properties do not have structures, but should be required to adhere to defensible space requirements in order to protect other properties.

Dr. Horne thanked all of the Fire Chiefs for their effort and asked some questions regarding 4291. She understands that this is a law that was written for California. California is a state that is one of the most diverse in terms of climate, topography, vegetation, and environment. So the issue is not so much 4291, but how do we best implement 4291 in this particular place, with this particular climate, with these particular soils. We have heard testimony from the BMP Retrofit group and have found that there is really not much disagreement about what is needed for defensible space and protection of lake clarity. We all need to commit to being wise stewards of this valuable resource. Dr. Horne said that it is important to come up with a consistent set of standards. She asked if the Lake Tahoe Basin Fire Chiefs would be will to sit down with BMP experts to work out differences and to work through the few grey areas that remain. She also asked what would be required to make it happen.

Answer: Believes that all Basin Fire Chiefs would be very willing to sit down with the experts to come to agreement. It would help, from a fire safety perspective, to come to an understanding of what constitutes the best solutions.

Commissioner Michael Brown added to the conversation by saying that this letter reflects an effort that has been in progress over many years. It is hoped that it offers solutions to problems that have long been identified. It is in a draft format because the Fire Chiefs are very open to input. This is important because they are “all risk” agencies taking all issues into consideration. A good deal of thought has gone into this letter.

Ms. Tuck suggested that the TRPA be invited to comment on the letter, to respond, and to offer suggestions.

Ms. Dargan said the TRPA has been invited to the commission’s meeting.

Mr. Hicks said that circumstances require immediate action and wondered if the Fire Chiefs agreed. Mr. Gigliotti agreed and said that they have long hoped for more action and though it is unfortunate that the Angora Fire happened, it is a good reason for bringing all interested parties together.

Mr. Rogich said that the expectation is that recommendations will be presented by March 2008, but that that does not preclude suggestions being made in the interim.

Mr. Drozdoff asked about the Fire Chiefs thinking in terms of water quality, access, controlled burns, etc., as well as fuel treatment. Mr. Gigliotti said that they continued to identify what the impediments are to protecting the basin from fire and to focus on possible solutions. The one looming issue is funding. The costs that the Fire Chiefs incur in treatment plans have been a serious impediment in meeting their goals.

Patrick Wright said that this letter and commission provide a good opportunity to facilitate communication between the TRPA, Lahontan Regional Water Quality Control Board (LRWQCB), and the Lake Tahoe Basin Fire Chiefs. They might sit around a table together and organize one set of rules and standards. He said that the nine point letter is very useful from a level of performance from a fire perspective. We will still need to work on a system for actually achieving these goals. For example, what will be required to meet compliance for defensible space?

Mr. Grijalva asked about the consequences of adopting all nine suggestions today. Would it require changes in TRPA regulations, in LRWQCB regulations, in Nevada and California state law?

Answer: Potentially yes. It is possible that some adjustments may be necessary in statutes, local ordinances, and standards. In terms of defensible space and erosion control Mr. Gigliotti said that during inspections the local fire agencies distribute information to homeowners that should be very helpful.

Mr. Upton said that the Chiefs’ letter is TRPA specific. He recommended gathering information from all agencies involved. For example, it is estimated that 73% of lots that need treatment in the Lake Valley Fire District are in SEZs. We will need to look at ways that we can get past impediments such as these.

Mr. McIntyre said that it would be interesting to learn more about the wildland urban interface and the priorities in fuel reduction. He asked the Chiefs to offer some information regarding prioritized areas.

Ms. Dargan said that she has a question for Lahontan Water Quality Control Board. She said that she remembered a statement made by Mr. Singer. He said that defensible space in SEZ had no limitations, or that any area within 100 feet of a structure could be treated. Ms. Kemper said that the area actually extends to 150 feet of a structure. To clarify, Ms. Dargan asked, if I am a homeowner and I wanted to clear the land around my home of potential fire hazards I can do so without a permit from the Lahontan Water Quality Control Board? Ms. Kemper said yes, that is true. The only instance they may take action is if a homeowner is using a bulldozer through a stream or some other extreme situation. They do reserve their authority to respond to complaints or concerns by neighbors. However, the TRPA would require notification.

#### MOTION

Accept materials from Basin Fire Chiefs

Moved: John Pickett

Second: Cindy Tuck

Vote: Unanimously accepted

Jim Santini and John Koster absent

#### MOTION

Table agenda items 4 and 5 until next meeting.

Moved: Jeff Michael

Second: Ron McIntyre

Vote: Unanimously accepted

Jim Santini and John Koster absent

The Co-chairs discussed the formation of committees and their requirements. Open meeting laws require recordings and minutes. The meetings will also need to be agendaized. There will be commission representation but members will also nominate three non-commission members. The committee today can begin to bring up names of members of the public who might serve on each board. Jim Pena and Ruben Grijalva have offered to serve as chairmen. The membership is well balanced with representatives from each state on the two committees.

#### Homeowners' and Community Fire Safety Committee

Ruben Grijalva, Chairman, John Pickett, Jeff Michael, Ron McIntyre, Cindy Tuck, Leo Drozdoff, Jim Wright, Bob Davidson, Bud Hicks.

#### Wildland Fuels Committee

Jim Pena, Chairman, John Upton, Amy Horne, Jim Santini, Pete Anderson, Julie Motamedi, Allen Biaggi, Michael Brown, Patrick Wright.

Duane Shintaku will be operations chief working with the committees and acting as liaison to commission staff. Any questions or concerns that committee members might have can be referred to Duane.

Ms. Dargan asked that after the initial meeting today each committee return with several items completed; 1) an outline of the structure, 2) identification of chairmen and/or co-chairs, 3) names of nominated non-commission members, 4) draft of scope of the work for each committee, 5) input and suggestions for presentations and guests who might be included in future meetings, 6) look ahead to six month deadline and plan for action items, 7) begin to think about putting together technical working groups that might assist the committee in their work, 8) two field trips have been suggested, each committee might look at these opportunities.

Ms. Tuck asked that water quality be included as categories on both committees' agendas. Balance of acres and quarter mile wildland interface should be added to the Homeowner and Community Fire Safety Committee.

Mr. Patrick Wright reminded the commission that many commissions are also addressing these issues and it would be important to work together to be certain that we are not duplicating issues. We should all work to have one strategy for the next six months.

The commission adjourned to committee meetings.

Upon return of the committees, Mr. Pena and Mr. Grijalva agreed to forward minutes and information regarding any decisions made to Dana Cole. A draft agenda for the full commission will be prepared by next Wednesday, September 26, 2007. Ms. Dargan said that the commission staff will review the committees' reports for urgent items and will be certain that they are included in the next meeting's agenda.

4. Consideration and possible development of recommendations for additional gubernatorial emergency declarations for the Lake Tahoe Basin. (Tabled for future consideration)
5. Discussion of existing restrictions of fuel management activities within the Lake Tahoe Basin, including grading and noise limitation. (Tabled for future consideration)
6. Ms. Dargan adjourned the meeting at approximately 5:15 pm.

